

Suspension Products



Aftermarket North America

- › Pressure Protection Valves
- › Height Control Valves
- › Dump Valves
- › 3-Way Pilot Valve
- › Linkage
- › Scale-O-Matic
- › ILAS® III
- › ILAS® E
- › COLAS®



Innovative Vehicle Solutions



Air Suspension System Products

If Technology, Quality, Performance and Value are Important, There is Only One Air Suspension System Brand to Consider, Haldex.



Height Control Valves for Truck, Trailer, Industrial and Recreational Vehicle Suspensions

Haldex is a leader in developing height control valves for truck, trailer, industrial and recreational vehicle air suspensions. Our Controlled Response (CR) height control valve has been used in the industry for many years. In addition to the CR valve, Haldex offers the Precision Response (PR) and Precision Response Plus (PR Plus) height control valves. The PR and PR Plus valves provide faster installation and reliability in the toughest conditions.

The PR and PR Plus valves were designed with the needs of the OEM and fleets in mind. They offer reliable dynamic seal technology and features that save installation time, eliminate expensive fittings and simplify plumbing. The PR Plus was the first and only to offer customizable supply and delivery port manifolds. The PR Plus is available with integral dump options for normally open or normally closed configurations. The combination of the custom manifold and dump options eliminate extra components, lines and leak points in the air system. The PR Plus valve offers distinct benefits that set it apart from the competition.



ILAS® III and COLAS®

The ILAS® III and COLAS® valves offer more than just the functional raising and lowering of a lift axle or deck of a trailer. They also offer an automatic feature unique to each valve. The ILAS® III can automatically lower and raise lift axles without operator intervention. The COLAS® can automatically reset deck height to the normal ride height of the trailer without operator intervention.

Looking For A Quality Supplier

When looking for an air suspension system supplier, you should look for more than just the lowest possible price. Look for innovative air suspension technology that will protect your essential investment with



quality, reliable performance, extended maintenance and the lowest cost of ownership over the period of service.

The Haldex Pressure Protection Valve Will Maintain Sufficient Pressure for Brake System Operation in Case of Failure in Accessory Systems

Premium Version Features and Benefits



90554107

- › Specifically designed protective cover seals the internal portion of the valve from harmful contaminants (salt, water, dirt, etc.) greatly increasing valve life.
- › Simple installation.
- › Integrated auxiliary filter is easily removed for cleaning which saves on labor costs.
- › Priced competitively and interchangeable with other brand valves.
- › Each valve individually calibrated for accuracy.
 - 75 psi opening pressure
 - 70 psi closing pressure
- › Very durable valve that will reduce replacement costs.
- › Use in air suspensions, air seats and cab isolation systems.

Economy Version Features and Benefits



90555396

- › Three basic closing pressure settings.
 - 90555396 - 65 psi nominal
 - 90555397 - 80 psi nominal
 - 90555398 - 90 psi nominal
- › Durable design increases product life, reducing replacement costs.
- › Use in air suspensions, air seats and cab isolation systems.



**UNCERTAINTY
AHEAD**

Don't be Fooled by Imitations

Only genuine Haldex suspension control valves combine OE quality with reliable height control performance. Only genuine Haldex valves ensure proper ride height, reduce driveline wear and 5x increase in reliability and overall operational life.

The precision time-delay feature of genuine Haldex valves reduces air consumption and provides optimal efficiency to minimize compressor wear. Counterfeit valves are inconsistent and increase overall air consumption. Genuine Haldex valves are 100% tested at the end of the line, providing higher quality assurance.

Offshore imitation valves can leak and freeze up, causing air suspensions to operate above or below proper ride height. The inconsistent or nonexistent time-delay functions of imitation valves may cause ride height malfunction. The failure of imitation valves often leads to expensive equipment repairs in transmissions or pinions. These failures may also result in over-height operation, which could lead to bridge impacts that are both costly and dangerous.

So, don't be fooled by imitations - rely on GENUINE HALDEX!



www.haldex.com
1-800-643-2374

Controlled Response Height Control Valve

Time Delay Height Control
Valve for Tractor and Trailer
Air Suspensions and
Industrial Applications.

- › Controlled response time delay technology maintains chassis position and conserves air to increase compressor life.
- › Robust die cast zinc body, precision machined steel and durable plastic components to ensure operation in extreme conditions.
- › Available with 1/4", 3/8" or metric filter fittings, with integral dump valves and break away arms.
- › Flexible right or left mounting options, these features allow ease of installation and reduce inventories.
- › Minimum deadband range provides excellent control of suspension ride height to maintain drive system pinion angles.
- › Optional integrated dump valve provides the ability to automatically or manually exhaust air from the suspension.
- › Affordable package pricing offered.



90054007

Haldex Part No.	Description	Fittings
90054007	Type CR - Controlled Response Height Control Valve	1/4"
90554114	Type CR - Controlled Response Height Control Valve	No Fittings
90554183	Type CR - Controlled Response Height Control Valve	3/8"
90554334	Type CR - Controlled Response Height Control Valve with Dump Valve	1/4" & 3/8"
90554648	Type CR - Controlled Response Height Control Valve with Dump Valve	1/4" & 3/8"
90054007P20	Type CR - Controlled Response Height Control Valve - 20 Units	1/4"
90054007P100	Type CR - Controlled Response Height Control Valve - 100 Units	1/4"

Dump Valves



90554335

Optional Normally Open
Dump Valve, Gold Body



90554902

Optional Normally Closed
Dump Valve, Silver Body

PR and PR Plus Height Control Valves

The PR and PR Plus Height Control Valves can be used to maintain the ride height for any truck, trailer, industrial or recreational vehicle air suspension.

- › The precision response design
 - Acts immediately
 - Reduces total air consumption
 - Controls dynamic drift
- › Ceramic Seal technology provides product durability and reliability by eliminating dynamic rubber seals used in other valves.
- › Primary shaft supported by self-lubricating high performance bearing.
- › The industries tightest deadband eliminates ride height variation and reduces equipment damage.
- › Can be mounted in multiple orientations and can easily replace other brands of height control valves.
- › Available with an adjustable control arm and optional dump valve to make installation and plumbing more efficient.
- › Numerous manifold options are available to reduce installation time, unnecessary fittings and leak points.



Critical Ceramic Dynamic Seal

Air suspension systems are vulnerable to contaminants that can damage the internal components of height control valves. Our competitors use rubber seals that are susceptible to wear and degradation caused by contamination. The Haldex PR valve seals on a ceramic surface that is resistant to contamination. The ceramic seal technology is proven to outlast the competition's rubber seal technology in all conditions.

Air Flow Profiles and Deadband

PR valves will immediately respond to changes in ride height due to the loading of the vehicle. A tapered flow profile allows precise response to changes in ride height without excessive air consumption. The flow profile with the ceramic seal is accurate, precise and repeatable in all conditions. The rubber seal used by our competitors are dramatically affected by wear and temperature and can cause a shift in the flow profile.

The deadband area (when the movement of the control arm neither adds nor releases air into the air springs) is tightly controlled. A small and consistent deadband results in minimum air consumption and reduces both driveline and component wear.

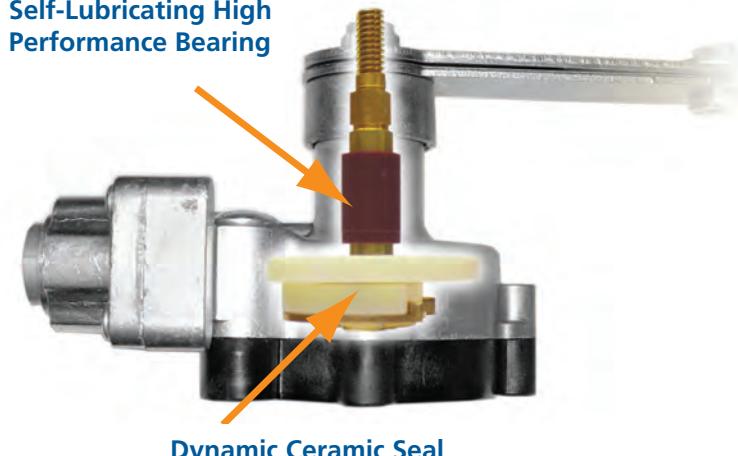
Adjustable Control Arm

The Haldex PR and PR Plus valve adjustable control arm design reduces cost by enabling accurate and quick adjustment during installation. Competitive designs are often confusing and complicated with multiple adjustment points which increase installation time and labor.

Customizable Manifold

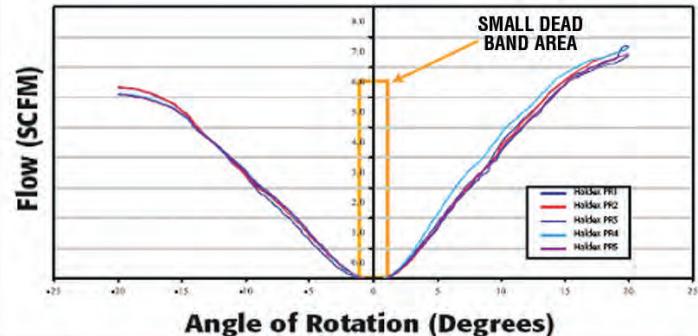
Haldex PR Plus height control valves offer customizable manifolds, providing supply and delivery ports tailored to the OEM application. The custom manifold will improve the airline plumbing, reducing the total number of fittings and excess tubing. The manifolds can be configured with threaded ports or with Push-to-Connect (PTC) fittings. Other height control valves require additional fittings and tubing, resulting in increased material costs and increased labor for installation.

Self-Lubricating High Performance Bearing



Dynamic Ceramic Seal

Haldex PR Valve Flow Profile



Angle of Rotation (Degrees)



Manifold with Push-to-Connect (PTC) Fittings



Manifold with Threaded Ports

Volvo - Mack Replacement PR Valves

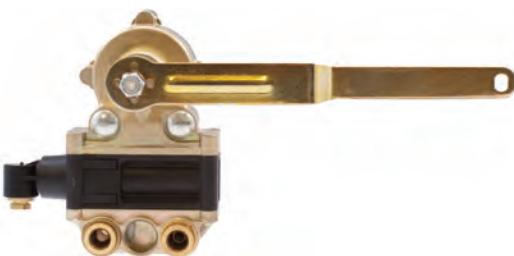
90555353



- › 7" Fixed Arm
- › Normally Open Dump
- › 5 Port 3/8" PTC Side Manifold can be used instead of 90555263 by plugging 2 delivery ports

Volvo	Mack	Haldex
21126541		
20908571		
20788736 Old	N/A	90555355 90555254
85112623		
85108667		

90555263



- › 7" Fixed Arm
- › Normally Open Dump
- › Replacement Bracket
- › 3 Port 3/8" PTC Side Manifold

Volvo	Mack	Haldex
21126543		
20908582	99QK418M	90555356 90555262
2033734 Old		
85109873	5396-90555263	

90555318

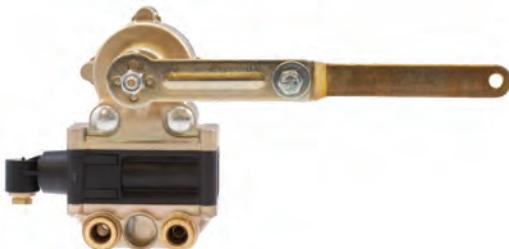


- › 7" Fixed Arm
- › Normally Open Dump
- › 3 Port 3/8" PTC Side Manifold with ports on back side of valve

Volvo	Mack	Haldex
20839693	99QK55AM	90555357
	99QK55M	90555268
20888298	99QK56M	90555289
20839691	99QK54AM	90555360
	99QK54M	90555271
N/A	5396-90555318	N/A

Kenworth Replacement PR Valves

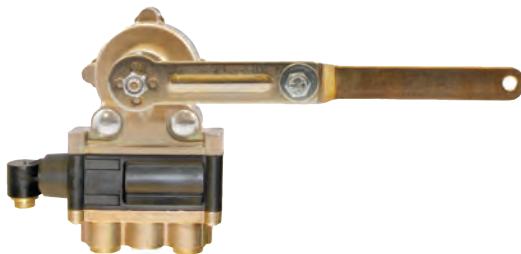
90555375



- › 7" Adjustable Arm
- › Normally Open Dump
- › 3 Port 3/8" PTC Side Manifold

Kenworth	Haldex
G90-1099-024	90555121
G90-1073-024	
G90-1099-026	90555119
G90-1073-026	
G90-1099-095	90555141
G90-1073-095	

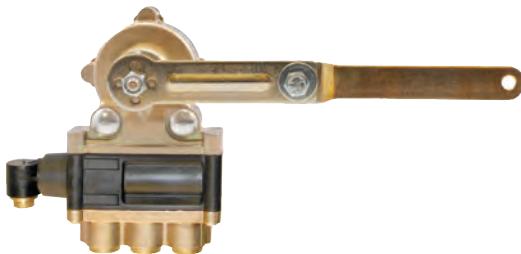
90555376



- › 7" Adjustable Arm
- › Normally Open Dump
- › 2 Port 3/8" PTC Straight Manifold

Kenworth	Haldex
G90-1099-007	90555126
G90-1073-007	
G90-1099-008	90555127
G90-1073-008	
G90-1099-011	90555130
G90-1073-011	
G90-1099-012	90555131
G90-1077-012	
G90-1099-097	90555143
G90-1073-097	

90555377



- › 7" Adjustable Arm
- › Normally Open Dump
- › 3 Port 3/8" PTC Straight Manifold

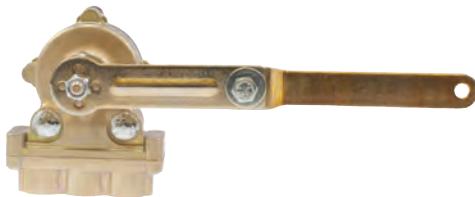
Kenworth	Haldex
G90-1099-029	90555257
G90-1073-029	
G90-1099-014	90555133
G90-1073-014	
G90-1099-016	90555135
G90-1073-016	
G90-1099-018	90555137
G90-1073-018	
G90-1099-020	90555139
G90-1073-020	
G90-1099-099	90555145
G90-1073-099	

SAF Holland Replacement PR Valves

Haldex Part No.	Description	SAF Holland Part No.	Haldex OE Part No.
90555100 	› 5.5" Adjustable Arm › Normally Closed/Low Flow Dump › 3 Port 3/8" PTC Same Side Manifold	90560008	90555074 90555084
90555101 	› 5.5" Adjustable Arm › Without Dump › 3 Port 3/8" PTC Same Side Manifold	90560004	90555031 90555247
90555116 	› 5.5" Adjustable Arm › Normally Closed Dump › 3 Port 3/8" PTC Same Side Manifold	90560003	90555090 90555250
90555300 	› 9" Adjustable Arm › Without Dump › 3 Port 3/8" PTC Same Side Manifold	90560102	90555298 90555299
90555303 	› 9.5" Adjustable Arm › Normally Closed Dump › 3 Port 3/8" PTC Same Side Manifold	90560101	90555301 90555302
90555306 	› 7" Adjustable Arm › Without Dump › 3 Port 3/8" PTC Same Side Manifold	90560100	90555304 90555305
90555309 	› 7" Fixed Arm › Normally Closed Dump › 3 Port 3/8" PTC Same Side Manifold	90560099	90555307 90555308

Universal PR Valves

90554945



- › 7" Adjustable Arm
- › Without Dump
- › 3 Port 1/4" NPT Straight Manifold
- › For Truck, Trailer and Front Axle Applications

90554950



- › 7" Adjustable Arm
- › Normally Open Dump
- › 3 Port 1/4" NPT Straight Manifold
- › For Truck and Tractor Axle Applications

90555108



- › 7" Adjustable Arm
- › Normally Closed Dump
- › 3 Port 1/4" NPT Straight Manifold
- › For Trailer Suspension Applications

90555109



- › 7" Adjustable Arm
- › Normally Closed/Restricted Flow Dump
- › 3 Port 1/4" NPT Straight Manifold
- › For Trailer Suspension Applications

90555335



- › 7" Fixed Arm
- › Without Dump
- › Integrated 2 Port 1/4" NPT
- › For Trailer, Cab and Front Axle installations
- › Replaces most Barksdale and Hadley valve installations

90555365



- › 7" Adjustable Arm
- › Without Dump
- › Integrated 2 Port 3/8" PTC
- › For Trailer, Cab and Front Axle installations
- › Replaces most Barksdale and Hadley valve installations

EGP Height Control Valve

North American Version
in the EGP Valve Family



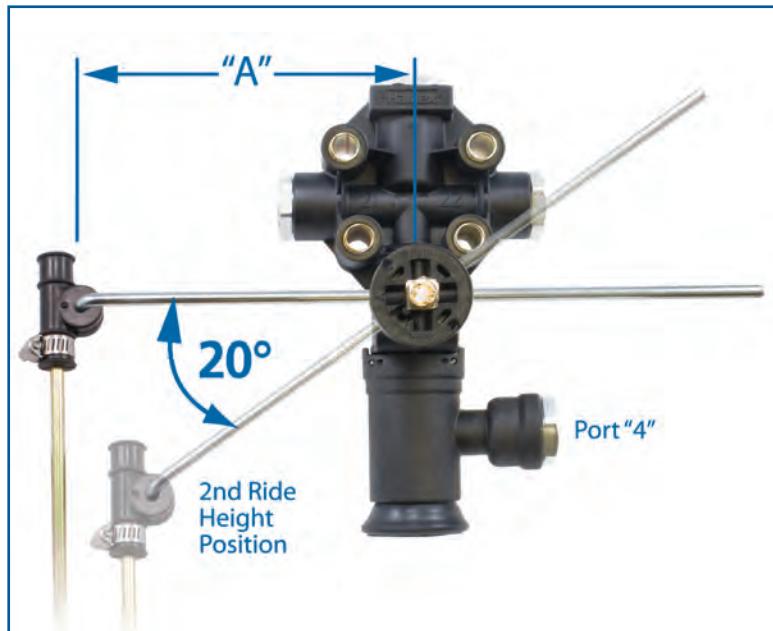
90555105

- › Dual or single circuit operation without extra ports or fittings.
- › High grade durable all plastic construction for corrosion protection.
- › Optional dump valve available.
- › 1/4" NPT Fittings.

Haldex Part No.	Description
KN27000	Standard flow with 14" lever arm
KN27013	High flow with 14" lever arm
KN27201	Low flow (valve only)
90555105	Standard flow (valve only)
90555106	Standard flow with normally open dump valve (valve only)
42150003	Standard flow with dual ride height (valve only)

Haldex Dual Ride Height Control Valve Kit (42150003)

When air pressure is applied to port "4" of the valve, an internal spool shifts and the valve goes to a set second ride position. The lever will appear at 20° in the 2nd ride position in neutral. Adjustment of the second ride height is according to the table below.



"A" Lever Arm Distance (in.)	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
Height Adjustment at 2nd Ride Position (in.)	1.0	1.4	2.1	2.1	2.4	2.7	3.1	3.4

3-Way Pilot Valve

A versatile valve that can be used with truck/tractor and trailer air suspension systems, manual and auto dump systems and as a lift axle air control valve.



90554615

- › Simple installation for normally open or normally closed operation allows one part number to be used in many applications. This flexibility reduces inventory and insures the correct parts are in stock.
- › Nitrile diaphragms for all-weather operation (- 40 to 200° F) and a beaded diaphragm lobe to eliminate air leaks found in many competitive valves.
- › Robust zinc casting with integral mounting flange and di-chromate coating makes the valve highly resistant to damage and corrosion.
- › Small size and optional push-in fittings make installation easy.
- › Competitively priced and interchangeable with other brand valves.

Adjustable Linkage



48100225

- › Common trailer suspension linkage used by several OE manufacturers.
- › Linkage can be cut to obtain desired length (19" maximum).
- › Easy to assemble and install.

Adjustable Looped Linkage



48100374

(16" maximum length)

48100375

(22" maximum length)

- › Common truck/trailer suspension linkage used by several OE manufacturers.
- › Adjustable link end allows for easy installation.
- › Fixed looped end provides durability.
- › Linkage can be cut to obtain desired length (48100374 - 16" max.; 48100375 - 22" max.)

Adjustable Strap Linkage



48100367

- › Common trailer suspension linkage used by several OE manufacturers.
- › Linkage can be welded at desired length to avoid field adjustment issues (14" maximum).

Scale-O-Matic



42123026

Model SMD-111

- › Enclosed manual switch, pilot valve and silicone filled gauge.
- › One height control valve system with manual lowering of suspension.



42123044

Model SM-140-2

- › Enclosed silicone filled gauge with calibration decal. Plumbing out the bottom of the enclosure.
- › One height control valve system with calibration decal and economical round enclosure.



42123031

Model SM-115

- › Enclosed manual switch with silicone filled gauge. Plumbing out the left side of the enclosure.
- › One height control valve system with manual lowering of suspension or control of air release of slider pins.



42123039

Model SM-130

- › Silicone filled gauge with calibration decal.
- › One height control valve system with calibration decal for quick reading of vehicle loads.



42123040

Model SD-140

- › Enclosed silicone filled gauge with calibration decal. Plumbing out the bottom of the enclosure.
- › One height control valve system with calibration decal for quick reading of vehicle loads.



42123042

Model SM-115-1

- › Enclosed manual switch with silicone filled gauge. Plumbing out the bottom of the enclosure.
- › One height control valve system with manual lowering of suspension or control of air release of slider pins.



42130040

Model AC-9014

- › Enclosed regulator and silicone filled gauge.
- › Auxiliary axle control system with regulated air for air spring pressure control.



42140128

Model AC-9088

- › Enclosed manual switch.
- › Self-releasing manual switch to activate dump valves or Haldex Pilot Valves.



42123043

Model SM-140-1

- › Enclosed silicone filled gauge with calibration decal. Plumbing out the back of the enclosure.
- › One height control valve system with calibration decal for quick reading of vehicle loads.



LARGE ENCLOSURE BOX

90554346



SMALL ENCLOSURE BOX

90554628

ILAS® III Valve (Integrated Lift-Axle System)

Fully pneumatic lift axle control valve - Manual and automatic versions provide flexibility with any lift axle application.



90555426

ILAS® III Automatic

- › ILAS®III (Integrated Lift-Axle System) provides precise operation of lift axles for commercial vehicles and trailers.
- › Manual version automatically lowers lift axle; lift axle is manually raised.
- › Automatic version automatically lowers and lifts the lift axle.
- › Integrated mounting holes and solid structure allow for easy installation.
- › ILAS®III replaces many lift axle systems which typically require multiple components and fittings.
- › Fitting Kit RN21BA (includes five threaded PTC fittings).



90555425

ILAS® III Manual

ILAS® E Valve (Integrated Lift-Axle System)

New member in the ILAS® family of valves specially developed for electronically controlled lift axles



90555326

ILAS® E Power Cable - 814012131

COLAS®

- › Manual raise/lowering hand valve for commercial vehicles and trailers.
- › COLAS® works with Single or Dual Height Control Valve systems.
- › Solid structure allows for horizontal or vertical installation and external mounting.
- › Optional automatic return to ride height makes COLAS® valve error proof.
- › One component and fewer fittings compared to four components and nine fittings in past kits.
- › Available with Push-To-Connect (PTC) fittings.
 - **96555270** (3/8" PTC fittings)
 - **90555292** (1/4" PTC fittings)
 - **62101007** (COLAS®E Kit with 3/8" PTC fittings)



90555270

Haldex develops and provides reliable and innovative solutions with focus on brake and air suspension products to the global commercial vehicle industry. Listed on the Stockholm Stock Exchange, Haldex has annual sales of approximately 3.9 billion SEK and employs about 2,200 people.

Disclaimer: The products described within this literature, including without limitation, product features, specifications, designs, availability and pricing are subject to change by Haldex and its subsidiaries at any time without notice.

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